



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,002	03/01/2002	Ronald Lynn Blair	PU020019	6287

7590 09/12/2007  
JOSEPH S. TRIPOLI  
THOMSON MULTIMEDIA LICENSING INC.  
2 INDEPENDENCE WAY  
P.O. BOX 5312  
PRINCETON, NJ 08543-5312

EXAMINER
----------

JONES, HEATHER RAE

ART UNIT	PAPER NUMBER
----------	--------------

2621

MAIL DATE	DELIVERY MODE
-----------	---------------

09/12/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**MAILED**

**SEP 12 2007**

**Technology Center 2600**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/087,002

Filing Date: March 01, 2002

Appellant(s): BLAIR ET AL.

---

Jorge Tony Villabon  
Reg. No. 52,322  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed June 1, 2007 appealing from the Office action mailed March 22, 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,925,340	Suito et al.	8-2005
6,658,197	Shimura	12-2003

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 2, 8-11, 17, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Suito et al. (U.S. Patent 6,925,340).

Regarding claim 1, Suito et al. discloses a method for audio content playback during video trick mode playback, comprising: reading a coded digital data from a storage medium, the coded digital data comprising a video programming and corresponding audio programming; decoding from a portion of the digital data comprising the audio programming a plurality of digital audio samples corresponding to a selected portion of the video programming; repeating or dropping selected ones of the digital audio samples at a rate corresponding to a selected trick mode video playback speed of the video programming; and key shifting a playback audio pitch associated with the audio samples to compensate for the trick mode playback (col. 7, lines 31-46).

Regarding claim 2, Suito et al. discloses all the limitations as previously discussed with respect to claim 1 as well as disclosing the method further comprising generating an audio playback signal corresponding only to a remaining set of the audio samples (abstract).

Regarding claim 8, Suito et al. discloses all the limitations as previously discussed with respect to claim 1 including that the storage medium is selected from a group consisting of a DVD, a magnetic hard disk, magneto optical disk and a video CD (as can be seen from Fig. 1).

Regarding claim **9**, Suito et al. discloses all the limitations as previously discussed with respect to claim 1 including that the coded digital data is an MPEG format and the reading step further comprises decoding an MPEG bit stream to obtain said audio samples (col. 5, lines 53-60).

Regarding claims **10, 11, 17, and 18**, these are apparatus claims corresponding to the method claims 1, 2, 8, and 9. Therefore, claims 10, 11, 17, and 18 are analyzed and rejected as previously discussed with respect to claims 1, 2, 8, and 9.

Claims 3-7 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suito et al. as applied to claims 1 and 10 above, and further in view of Shimura (U.S. Patent 6,658,197).

Regarding claims **5**, Suito et al. discloses all the limitations as previously discussed with respect to claim 1, but fails to further disclose the method comprising repeating selected ones of the audio samples at a rate inversely proportional to a selected trick mode video playback speed of said video programming to produce a trick mode set of audio samples, and generating an audio playback signal corresponding to said trick mode set of the audio samples.

Referring to the Shimura reference, Shimura discloses a method comprising repeating selected ones of the audio samples at a rate inversely proportional to a selected trick mode video playback speed of said video programming to produce a trick mode set of audio samples, and generating an

audio playback signal corresponding to said trick mode set of the audio samples (Fig. 4; col. 5, lines 33-50; col. 6, lines 29-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the feature of having better quality sound at a lower speed as disclosed by Shimura to the device disclosed by Suito et al. in order to provide a user with a device that provides a quality sound at a higher or lower speed (during trick play).

Regarding claims 6 and 3, Suito et al. in view of Shimura discloses all the limitations as previously discussed with respect to claims 2 and 5 including that the audio samples are repeated  $1/n$  times, where  $n$  is equal to the selected trick mode playback speed relative to a normal playback speed as well as the audio samples are dropped at a rate of every  $n$  samples, where  $n$  is equal to the selected trick mode playback speed relative to a normal playback speed. (See Shimura: Fig. 4; col. 7, lines 29-32 – the inverse proportions are being used accordingly for faster and lower speeds than normal).

Regarding claims 7 and 4, Suito et al. in view of Shimura discloses all the limitations as previously discussed with respect to claims 2, 3, 5, and 6 including that the key shifting step further comprises shifting the playback audio pitch by a multiplying factor of approximately  $1/n$  as well as the key shifting step further comprises shifting said playback audio pitch by a factor of approximately  $1/n$  (Shimura: Fig. 4; col. 7, lines 29-32; Suito et al.: col. 7, line 31 – col. 8, line 8 – the frequency the pitch go hand in hand).

Regarding claims **12-16**, these are apparatus claims corresponding to the method claims 3-7. Therefore, claims 12-16 are analyzed and rejected as previously discussed with respect to claims 3-7.

**(10) Response to Argument**

The Appellant argues on page 18, lines 33-39 that Suito et al. fails to disclose “repeating or dropping selected ones of the digital audio samples at a rate corresponding to a selected trick mode video playback speed of the video presentation” because Suito et al. discloses that for each processing unit period, sound absence portion(s) of the reproduced sound signal are deleted or partially deleted within a range corresponding to a normal speed reproduction. The Examiner respectfully agrees that Suito et al. discloses that for each processing unit period, sound absence portion(s) of the reproduced sound signal are deleted or partially deleted within a range corresponding to a normal speed reproduction. However, the Examiner respectfully disagrees that Suito et al. fails to disclose “repeating or dropping selected ones of the digital audio samples at a rate corresponding to a selected trick mode video playback speed of the video presentation”. Suito et al. discloses in col. 1, line 58 – col. 2, line 18 and in the abstract deleting a sound absence portion or portions of the reproduction input sound signal in order to reduce the sound data to reproduce the sound signal in shorter time than a normal reproducing time. Furthermore, sound absence portions are part of the audio sample as a whole, for example, a pause in between two people speaking. Suito et al. also discloses in col. 2, lines 7-10

partly deleting a sound presence or portions of an amount that cannot be stored into the output buffer for reproduction, which means that sounds may be deleted as well if only deleting the sound absences is not enough to accommodate for the high reproduction speed. Therefore, deleting is the same as dropping selected ones of the digital audio samples and Suito et al. meets the claim limitations. Moreover, the claim does not require the apparatus to be able to repeat and drop selected ones of the digital audio samples.

The Appellant argues on page 19, lines 30-33 that Suito et al. fails to disclose "key shifting a playback audio pitch associated with the audio samples to compensate for the trick mode playback". The Examiner respectfully disagrees. Suito discloses in Figs. 3-6 that the samples go through an amplitude suppression process, which means the amplitudes of the samples are key shifted accordingly. Furthermore, formant component separation filter (73) in Fig. 3 separates the signal into a pitch component and a formant component and are outputted to the amplitude suppression section (76) (col. 7, lines 31-36). Therefore, the amplitude of the pitch component is suppressed and Suito et al. meets the claim limitations.

The Appellant argues on page 30, lines 10-13 that Shimura fails to teach, suggest, or anticipate adding or dropping selected decoded audio samples at a rate corresponding to a selected trick mode video playback speed because in Shimura there is no trick mode but an actual reduction in speed of a digital video tape. The Examiner respectfully disagrees. Shimura discloses in col. 2, line 57 –



Art Unit: 2621

col. 3, line 6 a speed detection step for detecting a reproduction speed of the recording medium and a pitch decision step for deciding the pitch in response to the output of the speed detection step, so that if the reproduction speed of the recording medium is lower than the travel speed of the recording, the pitch control step decides a pitch variable period and a pitch fixed interval. Slowing down reproduction of the recording medium is considered a form of trick play. Therefore, Shimura discloses a trick mode and meets the claim limitations.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Heather R Jones

Examiner

Art Unit 2621

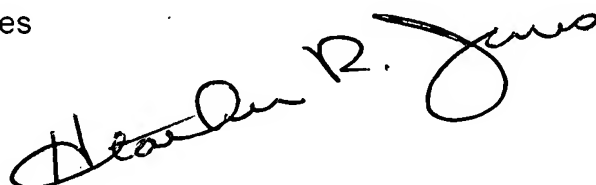
HRJ

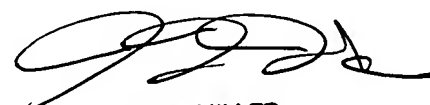
September 4, 2007

Conferees:

John Miller, SPE

Thai Tran, SPE

  
THAI Q. TRAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

  
JOHN MILLER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600